HAMATEUR CHATTER

The Milwaukee Radio Amateurs Club

March 2010, Volume 18, Issue 3

One of the World's Oldest Continuously Active Radio Amateur Clubs—since 1917

Presidents Letter

YOU! This club is all about you. The members of MRAC make MRAC happen. When I took over as president last June many said MRAC was at a low point. The board and I have been working to re-establish better times for the club. We've done a quite a bit of work to correct problems, many behind the scenes. We've also been working on the public face of the club. The things MRAC has always done are getting the attention they deserve. One of the items most members say is important at our meetings is the meeting program topics. The choice of a topic and arranging a presenter just doesn't "happen". It takes someone to have the vision for the topic and for someone to find, schedule and support a presenter. At the moment we have program topics scheduled until September and are working on ideas to complete the list for the rest of the year. We are always looking for YOU to suggest topics of interest and that has not and will not change.

The board continues to work to make sure MRAC survives into the future. YOU can be a part of this effort. YOU need to be a part of this effort. I was very encouraged to note at our last meeting those in attendance were proposing projects and suggestions. These will get attention going forward. In other words, YOU are already contributing to this effort. Jerry K9FI has proposed activating a lighthouse and operating a special event. This will could be one of our first events as described above. And… the board is working on some ideas soon to be disclosed to the membership giving YOU even more opportunities to bring back MRAC to the club we all want it to be.

On the topic of activities there are a few items to update. The first is some bad news. We missed our annual Christmas party at the end of 2009. We tried to reserve our usual location back in August and it was already taken. We tried to move the date and even considered a post holiday gathering (and considered joining in with other clubs to do so). Unfortunately the logistics involved took long past a reasonable date and we've since given up the effort. The good news is we are on the calendar for December 5th in 2010.

Another activity that is in limbo is Field Day. There is nothing planned for FD 2010 as we have had no volunteer to organize and run the event. Without someone stepping forward soon, MRAC will miss FD for the first time since FD began (back in 1933 if I remember right).

Now would be a good time to mention another activity added to our meeting night agenda. We have some items we are giving away to the first member to answer questions taken from information given in the Chatter. Last month the questions (by pure chance) all came from the President's column. Not true this month, but 1933 might be a good answer.

Another update regarding dues was announced at the last membership meeting. DUES ARE DUE as of the first of the year. MRAC has been lax about enforcing the due date. This has been creating a problem at our annual meeting in May. In order to vote in the elections YOU must be paid up in dues. This causes a mini-rush of folks wanting to pay dues. Unfortunately the timing is bad because the Treasurer needs to focus on the auction. The delay of collecting dues delays the elections and the auction. It has caused the evening to run a bit longer than most prefer. The solution is we have created a new policy regarding dues; a late payment policy. Dues paid after May 1st will be assessed a $3 late fee and total $20 for the year. We hope this will motivate members to pay before the May meeting. Dues may be mailed to the club PO box (still $17 per year), paid at a meeting (March and April meetings are still ahead) and we take dues at AES Superfest. The board also discussed how to handle new members joining later in the year. The board is considering that new members joining later in the year will be given credit for the remainder of the year and the following year. This would apply only to new members. Existing members would want credit for continuous membership towards a life membership.

YOU need to be aware elections are planned for May as dictated by the bylaws. All the officers and two of the director positions are up for nominations. We already know there is one position that is open as we have been

MRAC Officers:

Terms Expiring in 2010

- President – Mark, AB9CD
- V-President-Brian, K9LCQ
- Secretary – Mike, KC9CMT
- Treasurer – Vacant
- Director – Dave,WB9BWP
- Director – Dave,KA9WXN

Terms Expiring in 2011

- Director – Al, KC9IJJ
- Director – Hal ,KB9OZN
- Director – Dwain,KC9MJJ

The Club Phone Number is: (414) 332-MRAC or

(414) 332- 6 7 2 2

Visit our website at:

www.w9rh.org

Mail correspondence to:

M. R. A. C.

P.O. Box 240545

Milwaukee, WI 53223

Presidents Letter Continued:

unable to fill the spot since June (think Treasurer). We asked just about everyone either in person, at meetings, in this very newsletter and by email(s). No luck. Since we have no precedent allowing one person to run for two offices, yours truly will be running for the empty position. My logic is if we can't fill this spot, and I believe it is the easiest office (some argue VP is easier but I don't agree) and I have a choice, I'm going to run for it. This means I get to stay on the board and continue to assist the board in building MRAC for the future. It means YOU need to nominate a new President. Based on recent club history, this is an important choice and YOU need to consider carefully and select wisely. Whoever YOU choose has a good start but will need to work to keep the momentum we are building to continue forward. Our election committee will be addressing the group at this month's meeting. Related to elections, the current board is still working on a possible change to the structure of the officer/election process as mentioned in last month's column. We may run out of time for this year's elections. We will have an update at the membership meeting.

Speaking of the membership meetings, Dick Wood's (W9JBE) program on big antennas was very well received last month. I expect we will have a similar response to our program this month, LoTW (Logbook of The World). This will be presented by Brian Cieslak K9WIS. The program will introduce you to LoTW, include a live demonstration and will cover everything needed to get started and use LoTW.

Speaking of YOU. Remember the program for April will be by YOU! The April program will be a 'Show & Tell' session. Everyone should bring a favorite "toy" (or not so favorite) to present to the group. We want you to share in 5 minutes (+/- 3 dB) your experience with some piece of equipment, software, operating technique, project…. whatever… in an effort to spread experience and knowledge to your fellow club members.

Remember, this is YOUR club and IS what YOU make it. As always, I would like to know what you think about anything in this column or about the club in general.

Mark AB9CD

DUES ARE DUE

The MRAC membership year is January 1st through December 31st. Dues are due in January. Please obtain a renewal from the club web site or at a meeting and help support one of the oldest amateur radio clubs in existence.

Club Business & Information

SK Report by Dave Defebo, WB9BWP

In an effort to just try to keep up with things, we seen to be in the second decade of the current century picking up where we left off in the last decade with a number of club members passing away (21 from 2000 - 2009).

In January Bob Denneay KA9AAB passed away. He was only a member for a couple of years, and I don't think ever made a meeting, but he could be heard almost every week on the Friday night club nets. Even up to a week or two before his passing. If you never get on the nets, then you may have never met him.

On March 11 Ed Seruga KE9JJ passed away. I had known Ed for almost 30 years. Ed first joined the club in 1951 but was only around for a short time. He returned in 1981.
During the club's run of classes from the 70's, to the 90's, Ed taught the Technician/General class from 1985-1989 (some of that time with Harry Cieszki and some with John Lorbiecki). He also served as club Secretary from 1988-1992 (when officers served 1 year terms). Ed was involved in the club's efforts as a VE working with DeVry out of Chicago (1982-1984), before MRAC became a VEC of it's own. In 2003, Ed gave me a box of papers and photos from the club's past which are now part of the history book and photo album. He was also a member of the South Milwaukee Radio Club and I could count on seeing him directing traffic at their annual hamfest.

Ed retired from Badger Meter as an engineering manager. In the mid 80's he passed me some interesting personal dirt on my then boss at Marquette Electronics, who had spent some time working for Ed at Badger. When I told my boss of knowing Ed he got a very scared look on his face. Hmmm.
Ed moved out to Wind Lake some years back and I didn't get to see him much, but did have the opportunity to talk with him on the repeater occasionally.
However it had been at least a year since I heard from or saw Ed.

The MRAC family has lost 2 more...

MAY MEETING IS ANNUAL MEETING

Per the bylaws our annual meeting in May is a special meeting for the purposes of holding elections. Expect additional special meeting business regarding changes to the bylaws.

Board of Director's Meeting Minutes

Meeting called to order at 7:00 PM.

Present: Mark, AB9CD, Dwain, KC9MJJ, Dave DeFebo, WB9BWP , AL, KC9IJJ, Michael, KC9CMT., & Hal, KB9OZN.

Excused: Brian, K9LCQ, Dave, KA9WXN.

Secretary report read by Michael, KC9CMT. Motion to accept Meeting Minutes as read. Motion made by Dwain KC9MJJ. Second by HAL, HB9OZN. Accepted by a vote of 6-0

Treasurer Report read by Mark, AB9CD,$13,296.96 total in General fund as of start of February. Club Callsign has been renewed by FCC. Insurance has been set at $320/yr. This is club's liability insurance. Marsh Liability Insurance is the underwriter. Phone bill has increased by $10/mo. To $96/mo. Money donation made to church meeting place in February. Church asked to provide storage space for club meeting materials.

Motion to accept treasurers report as read made by: AL, KC9IJJ, Seconded by: Dwain, KC9MJJ. Minutes from Treasurer accepted by a 6-0 vote.

PRELIMINARY DSCUSSIONS:

Xmas Party set for Sunday December 5th at Meyer's in Greenfield.

Repeater Report:

Not as much activity as usual. Activity down for January period. IDing of operators has been a problem. Repeater is running within specifications. Club Repeater runs with very little maintenance. Technical committee has been monitoring some usage issues. Board is keeping track of all issues.

Old Business:

Club Officers: Club still in need of Treasurer. Motion made to discuss drafting of change in by-laws in this regard.

Sound System: No progress to report as of yet. Board wants to acquire a different microphone-headset. A 900mhz system is preferred. The taping of the membership meeting should continue. It would be a desirable feature for a new sound system to allow recording of the membership meeting programs.

Club DVD's: New Version of DVD will be ready for AES SuperFest.

2011 SwapFest: Dave Shank, KA9WXN will head committee . Discussion tabled for this month.

Email addresses updated, needs further work.

Programs:

March: Log Book of the World Program.

April: Show & Tell Night. Fix ups Etc.. Projects or New Purchases from the Membership.

May: Elections and the annual Auction. Hosted by Dave DeFebo.

June: Dave Shank will be back to discuss D-star from a users viewpoint.

July & August: No meetings Scheduled.

September—December: No programs scheduled yet.

New Business:

FM Simplex Contest: Club Radio reported to have caused splash. (Wide Bandwidth). Will be switching in the future to different radio. Jeff, K9VS, sent out pre-contest mailings to prior year participants. The Board would like to thank Jeff for this effort. Contest results may be ready by March Membership Meeting. Awards by AES SuperFest, April 9 & 10, 2010.

Swapfest table: MRAC will purchase a table at the AES SuperFest. Volunteers needed to man table. Sign up sheet on Yahoo Group.

Election Nomination Committee: All officer positions are up for election this year, plus two Board of Director positions. Nominees will be announced at the April Membership Meeting and published in the April and May Chatter. Election cycle will start in March with a general email going out to all club members. Michael, KC9CMT to chair election polling committee, Dave Shank, KA9WXN will assist when needed.

The Chatter: Instead of Email Attachments in 2010, perhaps send Email link to Yahoo Group chatter posting. Link to chatter will be announced during membership meeting. This is still an ongoing project.

Send second & third notice of renewal to all former members.

Club Project: Search for project that membership can work on and discuss during meetings. Ideas given: De-populate circuit boards, build simple circuits, or build a crystal set during a meeting.

Volunteers: In immediate need of a volunteer to step forward and act as **Field Day Captain**. Need volunteers for group activates such as Field day, AES Superfest table staffing etc..

Field Day: Still looking for Field day Captain. FD Captain will be given time at each club meeting to discuss and coordinate FD activates. Pioneer Village paid for year 2009.

Swapfest Discussions: Outdoor fests are preferred due to state smoking regulations. Good revenue generating function for club. More discussion during next Board Meeting.

Dues Restructuring: Must be paid member to vote in May election. Idea of pro-rated dues discussed. Collection of all Membership dues at one time is best for club. Payment of dues for year 2010 will be Changed after April meeting, A $3 surcharge will be added. Members paying in September will be credited with dues for the next year. The possibility of a membership kit being put together was suggested by Mark, AB9CD.

Change in By-Laws: President of board of directors will be responsible for assigning MRAC Officers duties to members of Board, if need should arise. Formal change in by-Laws to be presented during March Board Meeting by Michael, KC9CMT. Original idea proposed by Dave DeFebo, WB9BWP.

Tek Scope donations to club. One tek scope will be brought to each meeting until supply exhausted.

Motion to adjourn at 8:58 PM . Motion made by Dwain, KC9MJJ Second by Al, KC9IJJ. Passed 6-0.

Room returned to condition as found upon arrival.

Respectfully submitted,
Michael, KC9CMT

Membership Meeting Minutes

General Membership assembly called at 7:00pm.

Excellent program on the building of a big antenna presented by Dick Wood. Quad antennas' are good for DX work. Most quad's are vertical with horizontal arms in line with each other. This has been know to create moisture problems. Dick discussed the erection of his Gem Quad multiband HF antenna that he bought from Manitoba, CA. Dick likes the Gem Quad's due to the better spacing between elements.

Dick now uses a 4 element quad. It has no problems with Icing. Though, birds have been know to get stuck up in the elements. Dicks uses black wire ties that are more UV resistant. He has proven that Quad antenna's can be used in the harsh environment of Wisconsin.

Dick recommends the book on Quad antenna's by Bob Haviland, W9MB, "The Quad Antenna".

Construction of Dick's new Quad: New Quad had 13' boom, Dick has a tip over tower that helped ease construction. Quad was called "Spider". Fill wave length antenna elements on 10,15,17 & 20 meter bands. Quad is feed through a current balun for all bands into one feed line. Dick and his partner had to grind down the boom O.D. to fit the extra element rings. They recommend and used a pulley system to lower the tip over tower. Gearing was 6:1. Dick installed a new feed line also during construction. Dick recommends a new feed line at least every ten years.

Membership Meeting: Called to order at 8:17pm.

Membership meeting minutes from November read and a motion to accept the minutes as read was made by Brian, L9LCQ, seconded by Dwain, KC9MJJ. Motion carried by voice vote without dissent.

Treasurers' report for November through the beginning of February read by Mark, AB9CD. Club treasury contained $14,532.09 total as of the end of the year 2009. $14,016.03 as of end of January, and $14,873.91 and of beginning of February. AT&T bill has increased by $10/mo. Liability insurance has been paid for the year. Motion to accept Treasurers' report as read made by Al, KC9IJJ, seconded by Joe, N9UX. Motion to accept carried by voice vote without dissent.

General discussion: Still in need of a **Field Day Captain. Call or contact Mark, AB9CD to Volunteer.** Club will have a table at the upcoming AES SuperFest. Need volunteers to man table during event. FM Simplex Contest took place on February 21st. Event was excellent again this year. Club would like to thank the Fm Contest committee for their effort with a special gold star for Joe, N9UX. Dave shank ran Club station, W9RH. The Fm contest is catching on nationally with a mention in the QST January issue. Off-shoot contests are being held in New Jersey and California this year.

Issue of the late payment of club dues has been discussed by the BOD's with a $3 penalty enacted if dues are paid after April First. This is to eliminate confusion during May Election Meeting. BOD will also be entertaining a change in the by-laws to allow the President in residence to assign club duties to BOD members as needed.

Jerry, Commented that the Ozaukee radio club has a light house weekend event. He suggests that our club do that also. Upper Lake Park Lighthouse activation. Jerry will look into this type of activity.

Mark, AB9CD initiated a Chatter Quiz during this meeting, prizes were donated. Membership seemed to like idea. Ken Han and Mark, AB9CD have been going to Great Lakes Naval base to give VEC testing sessions.

Motion to adjourn meeting made by AL, KC9IJJ, Seconded by Brian, K9LCQ. Passed by voice vote without dissent.

Next Regular Meeting

The next meeting will be March 25th at 7:00PM. We meet in the Fellowship Hall of Redemption Lutheran Church, 4057 N Mayfair Road. Use the south entrance.

Please do not call the church for information!

Club Nets & Breakfast

Please check in to our nets on Friday evenings.

Our ten meter SSB net is at **8:30 p.m.** at **28.490 MHz USB.**

Our two meter FM net follows at 9:00 p.m. on our repeater at **145.390 MHz** with a minus offset and a **PL of 127.3 Hz.**

Join us for Saturday morning breakfast at **Maxim's Restaurant, 18025 W. Capitol Dr.** We usually meet at around 8:00 a.m., and order around 8:15 a.m. The food and the company are good and;

You don't have to be a member of the club to join us!

Visit our website at: **www.w9rh.org**

Or phone (414) 332-MRAC or 332 - 6722

Chatter Deadline

The **DEADLINE** for items to be published in the **Chatter** is the 15th of each month. If you have anything (announcements, stories, articles, photos, projects) for the 'Chatter, please get it to me before then.

You may contact me or Submit articles and materials by e-mail at: **Kc9cmt@earthlink.net**

or by Post at:

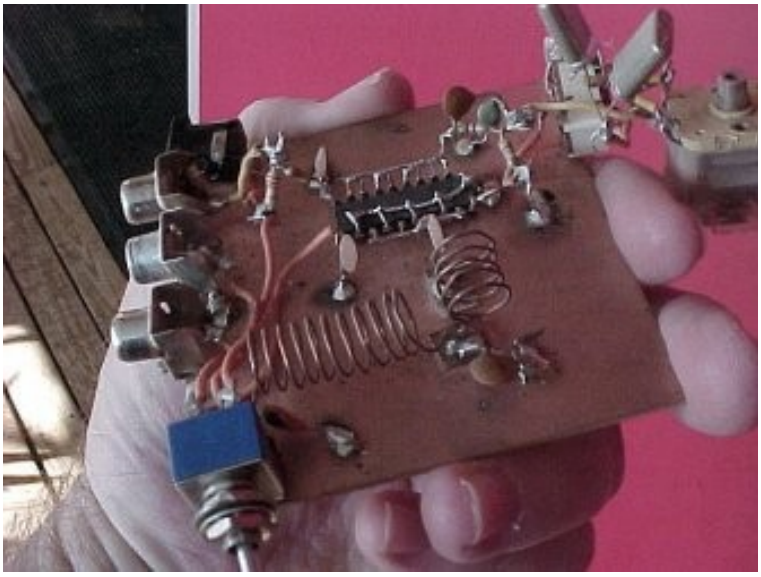
Michael B. Harris

807 Nicholson RD

South Milwaukee, WI 53172-1447

Club Repeater, 145.390Mhz Minus Offset (127.3 PL)

N7KSB Milliwatt transmitter that's easy to build



N7KSB used this transmitter, with a roof-mounted ground-plane antenna to work all continents and over 30 countries.

N7KSB's experimental 1/2 watt CW transmitter uses a 74HC240 high-speed CMOS octal buffer, one section which serves as a crystal oscillator, four sections of which amplify this signal, and three sections of which are unused. Because the 74HC240 dissipates 1/2 watt on 20M and 0.9 watts on 10M, it must be heat-sunk. Epoxying the IC to the ground plane in dead-bug of ugly construction provides adequate cooling. L1, a low-inductance coil, is sensitive to lead length, so if you build this transmitter with plug-in filters (Lew Smith uses phono plugs and jacks for this purpose), you may need to remove one or two turns from L1 to compensate for the extra lead length involved in wiring the coil plugs and socket.

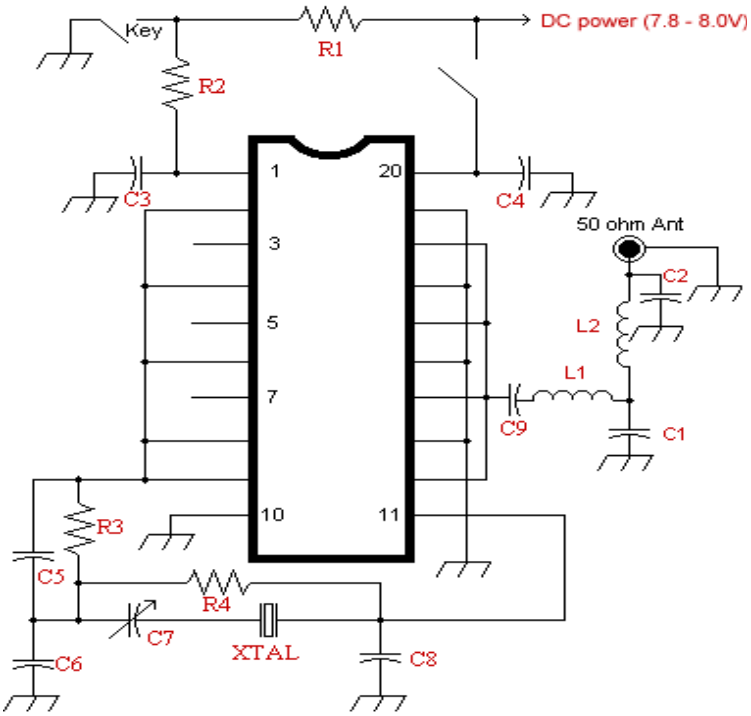
The newer 74HC240's available today show little power drop-off on 10M, while older ones exhibited a 20% power drop-off. The older 74HC240's can handle power up to 10V, the newer ones latch up at 9V. It is therefore important to operate the rig at a supply voltage of 7.8 to 8 volts, which is a compromise between maximum power and safety.

The logic chips have built-in input and output buffers. The extra gain provided by the extra stage make it harder to get rid of key clicks. The rig's key-click filter therefore uses an unusually large time constant (33 ms.)

The output stages in 74HCxxx devices are designed to have equal pull-up and pull-down transistors. This minimizes even-order harmonics, simplifying the rig's output filtering.

The 74HC240 can directly drive a power MOSFET amplifier.

Construction Details:



Band	C1	C2	L1	L2
10M	330	100	3 turns 5/8 inch	7 turns 5/8 inch
15M	470	150	4 turns 5/8 inch	10 turns 1 inch
20M	680	220	5 1/2 trns 5/8 inch	12 turns 1 inch

C1 and C2 are mica or ceramic.
L1 and L2 are air-wound from #14 wire, with an inner diameter of 3/8 inch.

R1 22K ohms
R2 330K ohms
R3 470 ohms
R4 47K ohms

C3 0.1 mf
C4 0.1 mf
C5 22 pf
C6 47 pf
C7 20 pf Variable
C8 47 pf
C9 0.1 mf

[Three of the 74HC240 chips will be made available in a first come, first served basis during the upcoming Membership meeting on March 25th. Please see Michael, KC9CMT.–ed]

Popular Science Monthly, May 1917, pages 795-799:

The author of this article, Capt. A. P. Corcoran, has just returned from France, where he served with the British army. His military work included the installation of signaling apparatus. The following contribution from his pen, therefore, will give our wireless readers some first-hand information on the war-time usage of radio apparatus.—EDITOR.

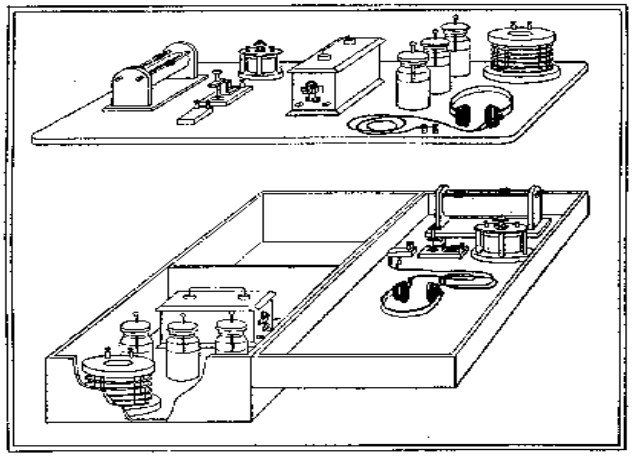
TO the public at large there is little that is romantic in the performance of the wireless man in warfare. He does not charge with bayonet fixed to rush an enemy trench. He does not kill or conquer. And the popular imagination finds it hard to see a hero in a man whose duty is the mere recording of others' exploits.

Like the dispatch-rider, indeed, the wireless operator is likely to become conspicuous only when he fails in the task assigned him. Then he has an opportunity to judge his importance by the measure of the opprobrium poured on him. When he fails, of course, he never fails alone.

Yet technical and unheroic as his task may seem, it calls for gallantry equal to that of any. Not only does he share in all the risks run by the Tommies, but he lacks all their means of defense. Though he stands side by side with them in the front line trench, ready to join in the attack, his sole weapon is his wireless apparatus. He carries neither rifle nor bayonet.

The position of the wireless man is now quite definite. There is no scrap in which he does not have his share, no division of the army in which he does not have his place, whether it be infantry, artillery, air-service or cavalry. That he is absolutely indispensable in achieving results has been conclusively proved in the battles along the Somme by endless instances of distinguished services rendered. In spite of his obscurity, he has won many decorations.

But that his service is still far from perfect, however effective it has proved, was still evident when I left France less than a year ago. I do not intend to be technical in my explanations in this article, but, in order to make clear the experimenting that has been done in wireless in this war, it is necessary for me to go back to the beginning. My aim is to give a short history of the wireless in France--its development in brief outline.



The first set was placed loosely on a board, but it soon became apparent that a different outfit was needed and one more easily transported; hence the box set came into use

At the very outset of hostilities, before the trench warfare had begun and the armies had settled down to their present deadlock, the wireless was necessarily of a different character from that used now.

Then a motor lorry set--a 1½ K. W. Marconi set--was supplied to the Signal Branch of the Royal Engineers. All through the retreat from Mons and during the fight on the Maine, this set was used and did excellent work.

But with the end of the moving fighting and the beginning of trench monotony, the lorry set lost its value. Soon it was entirely supplanted by the systematic working of trench telephones, and for a while the wireless went almost completely out of use . But not for long. The ineffectiveness of trench telephones under certain conditions was soon very painfully apparent. When actual fighting was in progress, they failed more than once at critical moments. Sometimes a shell would break down the communications; or an artillery battery would carry off the air line poles; or an enterprising Tommy, on his way through a communication trench, would cut off a length of cable to make a shoe lace. Even commanding officers who were always skeptical on the subject of wireless in the trenches, were forced to confess that their old friend, the telephone, was not always reliable in case of a crisis. So, on their recommendation, it was decided to undertake some experiments which would perfect the wireless for warfare.

The Beginnings of Wireless Radio: Winning the War with Radio.

It was now decided that the requirements of the new fighting called for a portable set for the first line trenches, and a group of officers who had already distinguished themselves in various capacities, were detailed to take charge of the work and evolve an instrument for the purpose.

They introduced a small, simple set consisting of a 1-in. spark coil, Leyden jar condenser (3) and an aerial coil. Receiving, a single inductance, silicon detector, variable capacity 'phone condenser and 'phones 1000 ohms. The aerial was supported on two 8-ft. bamboo poles, 80 ft. apart with a single wire. The ground consisted of a wire gauze mat 8 by 3 ft. With this set it was discovered that fairly loud signals could be heard from three to five miles.

When the instrument, however, was put to its first real test at L------, it rose magnificently to the demands of the situation, acting to its full range of five miles.

For a long time this set was used with excellent and unvarying results. In regard to the transmission of messages it lacked nothing. But it had just one drawback--a minor one but occasionally important. Being placed loosely on a board, it was clumsy to carry, a fact which often hindered the work by causing loss of time.

Once more the officers set to work. It was a Captain L------ who found the means of combating the difficulty. He discarded the board, and substituted a box 18 by 9 by 9 in. in which he placed the set. This was carried on the back and proved to be a most compact and convenient instrument.

I remember when the first experiments were made with this set, some distance behind the line. They took the form of contests between the wireless and telephone. A detachment from each would start off from a trench, as if during an actual engagement, to a position some 500 yd. distant. Then each would do his utmost to establish communications as quickly as possible.

From the very first the wireless man won by an average of some thirty seconds, no small consideration in warfare, when perhaps it is a question of holding ground already gained.

The instrument being now perfected, the next question was the training of the men. In England depots were at once established, and young fellows already equipped with a working knowledge of the job, such as Post Office Telegraphers and the like, were enrolled in the wireless section.

Similar schools were established in France behind the lines at each of the Army Headquarters, and the officers in charge would occasionally go into the trenches and pick out a few of the most intelligent infantry men with a view to training them as operators. No Tommy but tried his hardest to be picked. He looked on the training as a good opportunity to rest, a nice break in the monotony of trench life.

In addition to these schools for the training of operators, there was also one for the officers, to which I myself was attached for some time in the capacity of lecturer. The wireless section is now, of course, one of the largest and most important factors in the Royal Engineers, but at that time it was comparatively unimportant, and there was naturally a shortage of officers fully trained in this branch of the work.

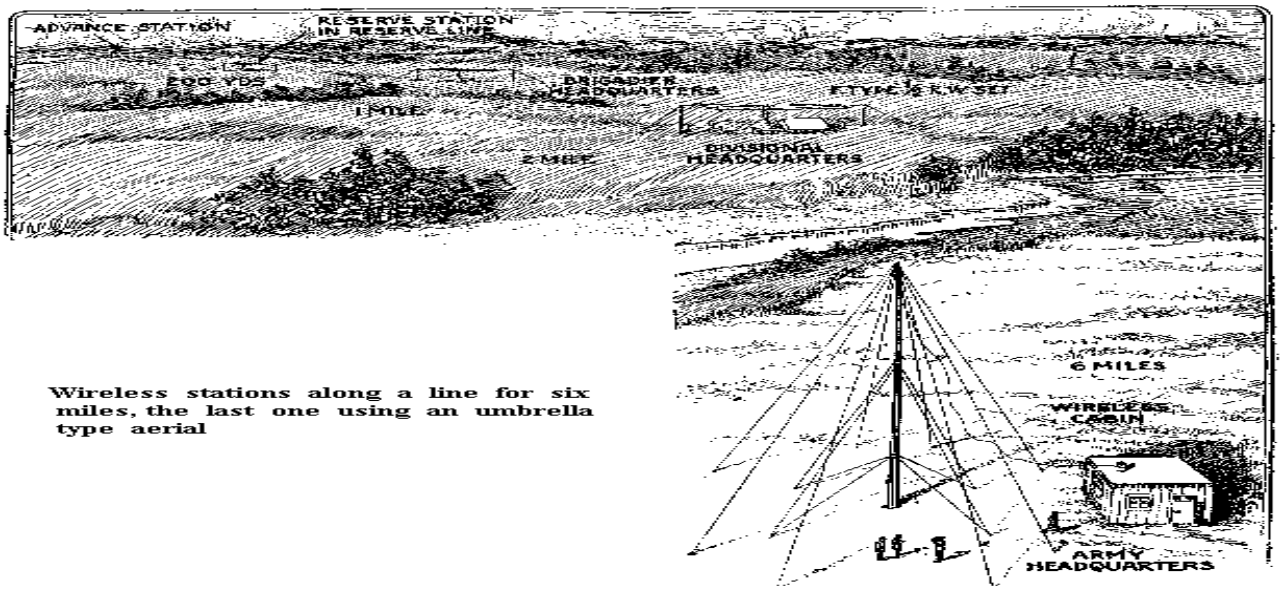
Consequently to meet this deficit it was the custom to bring back signaling officers from their brigades for a short, sharp course of two weeks. This, coupled with their previous knowledge of telegraphy and circuits, was found to be sufficient to make them efficient leaders.

The operator naturally took longer, being absolutely untrained in such work, and his course usually lasted from three months to four or even more. The measure of his qualifications, however, was high and definitely fixed. He had to be able to send and receive at the rate of twenty-five words a minute, English, and twenty words a minute code and foreign languages. He had to be able to assemble and dismantle Marconi 1½ K. W.; also to have a working knowledge of trench sets and a thorough knowledge of army procedure. As a matter of fact, he rarely needed to work to the full height of his ability, for, in actual warfare, he found that the necessary speed rarely exceeded from fifteen to twenty words a minute, according to the activity of the Boche gunners.

The wireless, as I have said, is now an essential part in all trench warfare. When the infantry advances to an attack, the operator is always slightly in the rear. Where formerly a detachment of men had to reel out hundreds upon hundreds of yards of cable to establish telephone communication between a trench newly taken from the enemy and the first line reserve behind, now the operator simply picks up his box, his ground mat and his aerial single-handed and advances simultaneously with the attackers. Arriving at his new position, he props up his aerial, lays his ground mat, and communications are established almost at once.

It would be hard to overestimate the importance of his duties. When an enemy trench is being taken, it is he who reports the progress of the encounter--the number of the enemy, the nature of their defense, the amount of the casualties on either side, the condition of the trench when it is finally taken--whether it has been badly damaged by artillery fire, or whether it is practically intact. If a gas attack is coming, it is he who sends the warning to the men behind to put their gas helmets on.

If the aeronaut can be called the eyes of the army, the wireless man is its ears. Naturally their work is made to dovetail. When one sees, the other hears and also reports.



Wireless stations along a line for six miles, the last one using an umbrella type aerial

The Beginnings of Wireless Radio: Winning the War with Radio.

Chatter, Volume 18, Issue 3, Page 8

One of the main duties of an aviator, as you probably know, is to reconnoiter for the army, and to report on the accuracy of the artillery fire and on the location of the enemy batteries.

But he does not have to descend to report his discoveries. For he, too, is equipped with a wireless set--a Wilson set is the one usually carried--with which he transmits his information to the man below.

This man is stowed away always in a dug-out, at a little distance from the battery. It is in accordance with the information he receives and transmits that the artillery fire is directed.

Every branch of the army, as you see, has its own particular station, and its own particular duties to discharge.

Back at Army Headquarters where the large station 1½ K. W. Marconi is situated, the work of the wireless mainly consists in intercepting communications from the enemy and taking aircraft reports. But though each of these stations works separately, they are all in close touch at all times. For instance, every battalion carries two trench sets, each having two operators. They are in the front line with the infantry. Back with the reserve, about one hundred yards behind, are two more sets and two more operators. Back still further is a larger set at Brigade Headquarters. At Divisional Headquarters is a ½ K. W. set, and at Army Headquarters is a 1½ K. W.

An attack is made. The battalion operators go over slightly in the rear of the infantry. They communicate with the station in reserve, who in turn pass it on to Brigade Headquarters, who pass it along to Divisional Headquarters, who report it to Army Headquarters.

A few have asked why this method of communication is adopted, and have suggested that it would be more effective if one large set were established close behind the line, to replace all these individual trench sets. Communication, they say, would then be direct with General Headquarters, and much time might be saved.

That was tried. I remember the occasion distinctly. The station was erected, the apparatus installed. This consisted of a motor lorry set, 1½ K. W., 120-foot steel mast, an umbrella aerial, with a complement of three operators. It stood for just two hours. Then over came one of those huge 5.9 shells, and the lorry set, the steel mast, the umbrella aerial and the three operators were all shot sky-high. I presume they have since then come down again. The result of this experiment, naturally, was an increased regard for the trench sets. But these were by no means perfect as yet.

Of course, in addition to the latter, there are automobile sets, aero sets, wagon sets which are used for all moving fighting, and pack sets for the infrequently active cavalry. But none of these has required the time and attention devoted to the instrument used by the infantry.

As the aerials have to be erected over the trenches, the poles being stuck on the parapet, they were naturally attractive targets.

Naturally their operators came in for their share of the snipers' shells.

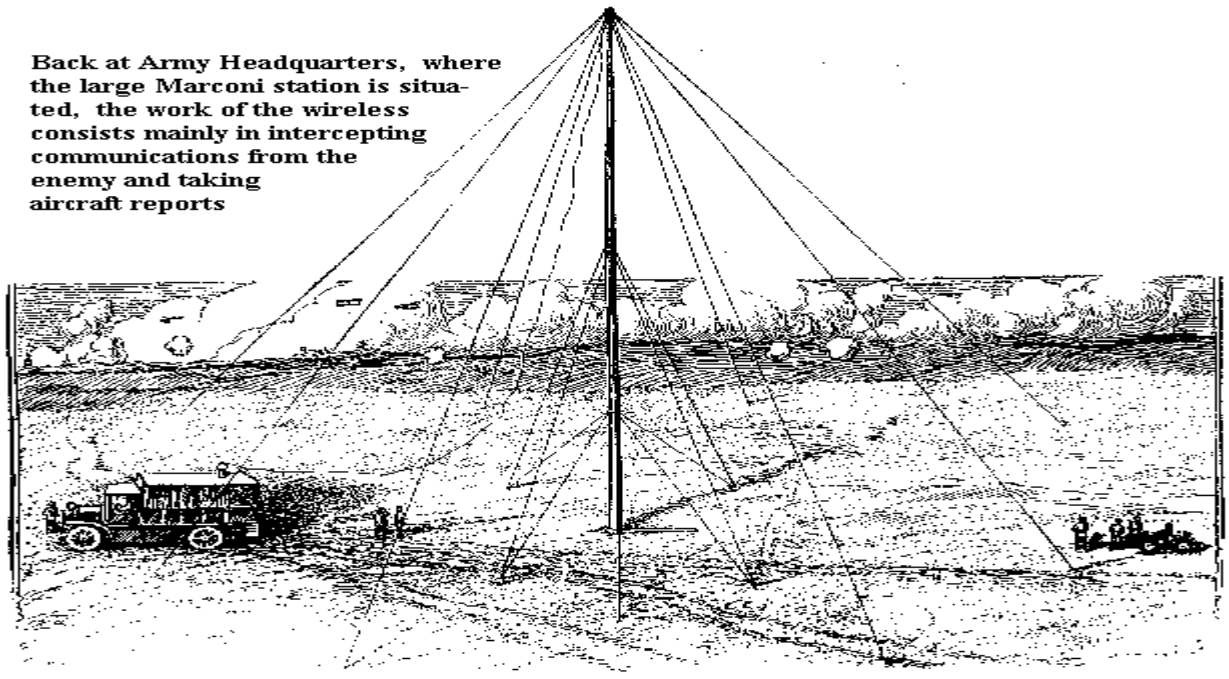
In this connection, I would like to tell the story of a friend of mine, Lieutenant L., which will bear out my contention that, when it comes to the scratch, a wireless man can be as cool as the next.

He was adjusting one of the stays of his aerial pole which had been disturbed by the falling of a shell close by. As he was doing so, over came a second shell, known to the Tommies as a "whizz-bang," which gave him a direct hit, tearing his arm clean away, except for a stump of 4 inches. He looked at it calmly for a couple of seconds.

"Well, that's a ticket for blighty," he exclaimed then, and fainted. (Blighty, it might be explained, is a Hindustanee word for home which the Tommies have adapted for their own use from the vocabulary of the Indian troops.)

It was such accidents as this, however, combined with the occasional collapse of the aerial, that convinced the authorities of the need for further experimenting. The officers were now given a more or less free hand to test ideas of their own.

When I left France, many new devices had already been introduced. From what I hear, they have since been perfected.



Back at Army Headquarters, where the large Marconi station is situated, the work of the wireless consists mainly in intercepting communications from the enemy and taking aircraft reports

WISCONSIN Monthly ARES Section News

** ARRL ROOKIE ROUNDUP

Rookie Roundup is a new contest specifically for those new to Amateur Radio.
It's designed to help newly licensed amateurs build their operating skills on HF, reminiscent of the ARRL Novice Roundup contest that ran from 1952 until 1995.
See http://www.arrl.org/contests/rules/2010/rr.html for the Rookie Roundup rules. Note that there have been some changes since the original announcement in March QST. The first RR is on April 18 from 1800 UTC through 2359 UTC.
Pass the word to your new club members!!

W1AW 2010 Spring/Summer Operating Schedule

Morning Schedule:

Time	Mode	Days
1300 UTC (9 AM ET)	CWs	Wed, Fri
1300 UTC (9 AM ET)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1400 UTC to 1600 UTC - (10 AM to 12 PM ET) 1700 UTC to 1945 UTC - (1 PM to 3:45 PM ET)

(Station closed 1600 to 1700 UTC (12 PM to 1 PM ET))

Afternoon/Evening Schedule:

2000 UTC (4 PM ET)		CWf	Mon, Wed, Fri
2000	" "	CWs	Tue, Thu
2100	" (5 PM ET)	CWb	Daily
2200	" (6 PM ET)	DIGITAL	Daily
2300	" (7 PM ET)	CWs	Mon, Wed, Fri
2300	" "	CWf	Tue, Thu
0000	" (8 PM ET)	CWb	Daily
0100	" (9 PM ET)	DIGITAL	Daily
0145	" (9:45 PM ET)	VOICE	Daily
0200	" (10 PM ET)	CWf	Mon, Wed, Fri
0200	" "	CWs	Tue, Thu
0300	" (11 PM ET)	CWb	Daily

Frequencies (MHz)

CW: 1.8025 3.5815 7.0475 14.0475 18.0975 21.0675 28.0675 147.555

DIGITAL: - 3.5975 7.095 14.095 18.1025 21.095 28.095 147.555

VOICE: 1.855 3.990 7.290 14.290 18.160 21.390 28.590 147.555

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

ARRL Weekly Newsletter Articles

PUBLIC SERVICE : AMATEUR RADIO OPERATORS WRAP UP COMMUNICATIONS SUPPORT IN HAITI

After the 7.0 magnitude earthquake struck the island nation of Haiti on January 12, many Amateur Radio operators asked how they could volunteer their time and service to assist with communications support.
When Project Medishare <http://projectmedishare.org/> -- a partnership between the University of Miami Medical School (UM) and physicians and health officials in Haiti -- needed help with their communications, Amateur Radio operators were quick to respond. According to Jack Satterfield, W4GRJ/AFA4DG, Medishare has constructed several health clinics in Haiti over the years -- all of which were destroyed in the earthquake. "Medishare was able to rapidly deploy medical teams and assets to begin the overwhelming task facing the post earthquake medical needs," he told the ARRL.

"UM Vice President for Facilities and Operations Ron Bogue was the Director in Charge of the Haiti operations. His concern about the unreliable communications caused him to contact Julio Ripoll, WD4R, with whom he has worked for years as the architect for UM Medical facilities. Ron knew that Julio is a ham radio operator and very involved with the National Hurricane Center in Miami and its Amateur Radio station, WX4NHC. Ripoll then contacted ARRL to request help in soliciting volunteers. ARRL immediately sent down an HF Go Kit -- through the ARRL's Ham Aid Program -- and put Ripoll in touch with ARRL West Central Florida Section Emergency Coordinator and Navy MARS Florida State Deputy Director Neil Lauritsen, W4NHL/NNN0TFH. Read more here <http://www.arrl.org/news/stories/2010/03/03/11371/?nc=1>.

AMATEUR RADIO IN SPACE: A CLOSE ENCOUNTER FOR AMSAT-OSCAR 51

While many in North America were fast asleep Monday morning, March 1, the AMSAT-OSCAR 51 (AO-51) satellite had a potentially dangerous encounter with another spacecraft known as Formosat 3D. OSCAR 51 is a popular Amateur Radio satellite that often functions as a crossband FM repeater, relaying brief conversations over hundreds of miles. Formosat 3D is part of a constellation of six remote sensing microsatellites that collect atmospheric data for weather prediction and for ionosphere, climate and gravity research. Both orbit at an altitude of approximately 500 miles. Read more here <http://www.arrl.org/news/stories/2010/03/03/11373/?nc=1>.

NEW DUES POLICY

Dues paid after May 1st will be accessed a $3 late payment fee making dues a total of $20 per year. Avoid the extra cost and pay your dues before May 1st. The purpose of this policy is to prevent delaying the election and auction at the May meeting with last minute payments to qualify for voting in the annual election.

Testing & Local Swapfests

VE Testing

No VE Testing In March!

Amateur Electronic Supply 5720 W. Good Hope Rd. Milwaukee, WI 53223

Swapfests

AES SuperFest April 8-9, 2010, *Amateur Electronic Supply 5720 W. Good Hope Rd. Milwaukee, WI 53223,*

Friday 2-6pm, Saturday 8-5pm.

The Ozaukee Radio Club Cedarburg Swapfest is May 1, 2010

WHERE : Circle B Recreation in Cedarburg, WI on Highway 60
WHEN : Saturday, May 1, 2010
TIME: Vendor table setup 6:00 am - Doors open at 8:00
ADMISSION: $5.00 for admission ticket on the day of the Swapfest for vendors or buyers ... $4.00 for advanced admission ticket paid for before May 1st for vendors or buyers.

Working Committees

Field Day

- Open

FM Simplex Contest

- Joe – N9UX
- Jeff-K9VS
- Dave-WA9WXN
- Brian-K9LCQ
- Sherm-KB9Q
- Mark-AB9CD

Ticket drum and drawing

- Tom – N9UFJ
- Jackie – No Call

Newsletter Editor

- Michael-KC9CMT

Webmaster

- Joe Schwartz—N9UX

Refreshments

- Michael – KC9CMT

Membership Information

The Hamateur Chatter is the newsletter of MRAC (Milwaukee Radio Amateurs' Club), a not for profit organization for the advancement of amateur radio and the maintenance of fraternalism and a high standard of conduct. MRAC Membership dues are $17.00 per year and run on a calendar year starting January 1st. MRAC general membership meetings are normally held at 7:00PM the last Thursday of the month except for November when Thanksgiving falls on the last Thursday when the meeting moves forward 1 week to the 3rd Thursday and December, when the Christmas dinner takes the place of a regular meeting. Club Contact Information Our website address http://www.w9rh.org

Telephone (414) 332-MRAC (6722)

Address correspondence to:

MRAC PO Box 070695,

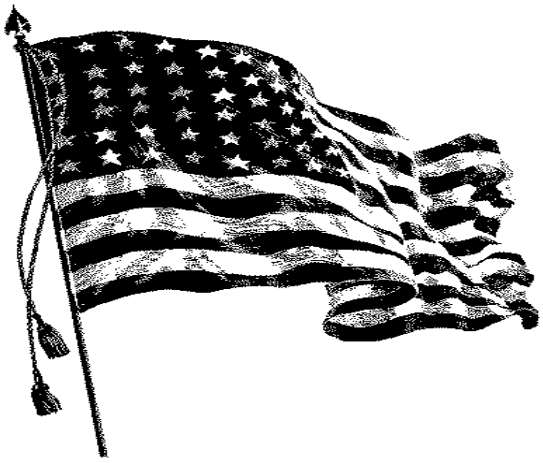
Milwaukee WI 53207-0695.

Email may be sent to

w9rh@arrl.net

Our YAHOO newsgroup:

http://groups.yahoo.com/group/MRAC-W9RH/



CLUB NETS:

- Our Six Meter SSB net is Thursday at 8:00PM on 50.160 MHz USB
- Our Ten Meter SSB net is Friday at 8:00PM on 28.490 MHz ± 5 KHz USB.
- Our Two Meter FM net follows the Ten meter net at 9:00PM on our repeater at 145.390MHz - offset (PL 127.3)

Milwaukee Area Nets

Mon.8:00 PM 3.994 Tech Net

Mon.8:00 PM 146.865- ARES Walworth ARRL News Line

Mon.8:00 PM 146.445 Emergency Net

Mon.8:00 PM 146.865- ARES Net Walworth

Mon.8:45 PM 147.165- ARRL voice news (ARES)

Mon.9:00 PM 50.160 6 mtr .SSB NET

Mon.9:00 PM 147.165- ARES Net Waukesha-Milwaukee

Tue.9:00 AM 50.160 6 . Mtr 2nd Shifter's Net

Tue. 7:00 PM 145.130 MAARS Trivia Net

Tue. 8:00 PM 7.035 A.F.A.R. (CW)

Wed. 8:00 PM 145.130 MAARS Amateur Radio Newsline

Wed. 9:00 PM 145.130 MAARS IRLP SwapNet

Thur. 8:00 PM 50.160, 6 mtr SSB Net

Thur. 9:00 PM 146.910 Computer Net

Fri. 8:30 PM 28.490 MRAC W9RH 10 mtr Net SSB

Fri. 9:00 PM 145.390 W9RH 2 mtr. FM Net

Sat. 9:00 PM 146.910 Saturday Night Fun Net

Sun 8:30 AM 3.985 QCWA (Chapter. 55) SSB Net

Sun 9:00 AM 145.565 X-Country Simplex Group

Sun.10:00 AM 443.800+ FM-38 link to 146.88 Baraboo SWAP Net

Sun 9:00 PM 146.910 Swap Net

Sun 8:00 PM 146.910 Information Net

Sun.8:00 PM 28.365 10/10 International (Milwaukee Ch.) (SSB)

2 meter repeaters are offset by 600KHz - - 70 centimeter repeaters are offset by 5 MHz

SSB frequencies below 20 meters are LSB and for 20 mtrs and above are USB.

Did You Know...

Wisconsin Tornado Weather Facts

- Wisconsin averages 21 tornadoes a year, but in the last few years alone, we've had as many as 62 and as few as 13.

- The peak tornado season in Wisconsin is April to August, but tornadoes can occur any time of year, like the January 7, 2008 storms near Kenosha.

- Tornadoes can occur any time during the day or night, but are most frequent between 4 pm and 9 pm.

- About 80% of tornadoes that hit Wisconsin are relatively weak, with winds under 110 mph. Only 1% are violent with winds over 170 mph.

Other Weather Awareness Dates:

Wisconsin's NOAA Weather Radio Awareness Day

May 12, 2010

Wisconsin's Heat Awareness Day

June 10, 2010

National Lightning Safety Awareness Week

June 20–June 26, 2010

Wisconsin's Winter Weather Awareness Week

November 8–12, 2010